

IN THE SPECIFICATION:

Please amend paragraph number [0008] as follows:

[0008] During operation, gases pass through the vacuum inlet 12 and are directed via inlet deflection plate 34 toward the outer diameter of the cylindrical housing 22. Gases then travel along the outer annulus 36 formed between outer deflection tube 24 that extend vertically downward from the inlet deflection plate 34 and the wall 42 of the cylindrical housing 22. Further, baffles 32 extending between the wall 42 of the cylindrical housing 22 and outer deflection tube 24 may cause the flow path of the gases passing thereby to be deflected radially as the gases move downwardly along ~~outer annulus~~ outer annulus 36. Upon reaching the lowest extent of the outer deflection tube 24, the gases move into annulus 38 formed between outer deflection tube 24 and the vertical structure comprising the coils 20 and coil separation elements 30 and sealing element 31. Separation elements 30 may be installed between coils 20 for structural support, or, alternatively, the separation elements may be omitted by positioning coils 20 proximate to one another and then affixing the coils 20 to one another via brazing or as otherwise known in the art. Sealing element 31 may be configured to engage and seal against the bottom inner surface 44 of the cylindrical housing 22 as the top plate 28 and cooling assembly 11 are installed within the cylindrical housing 22. As gases travel through annulus 38 they may be deflected by way of baffles 32 that extend therein. Thus, gases may condense on the outer deflection tube 24, on the coils 20, and on the baffles 32 as the gases travel through and interact with the cooled surfaces thereof. In addition, as may be seen in FIG. 1A, the gases continue to the upper end of the coils 20, and then may move radially inwardly into annulus 40, also traveling along and around the baffles 32 that extend between the inner deflection tube 26 and the coils 20. Inner deflection tube 26 may be affixed to the cylindrical housing 22 at the bottom inner surface 44 and may be configured to engage and seal against the surface of outer deflection plate 34. Alternatively, the inner deflection tube 26 may be affixed to the inlet deflection tube 24 and removed therewith for cleaning, as depicted in FIG. 1B. Aperture 45 formed in inner deflection tube 26 allows gases to move through the trap device 10 and eventually exit the trap device 10 through vacuum outlet 14.

Please amend paragraph number [0013] as follows:

[0013] U.S. Patent No. 6,206,971 B1 to Umotoy et al. discloses a ~~temperature-controlled~~ temperature-controlled exhaust assembly with cold trap capability and multizone closed-loop temperature control. More specifically, as to the trap apparatus, Umotoy utilizes an external heater around the inlet of a cold trap to prevent buildup therein.

Please amend paragraph number [0048] as follows:

[0048] Since deposits 113 may form upon delivery ports 152, 154, 156, 158, 160, 162, 164, 166, 168, and/or 170 (as shown in FIG. 2B), each or any of the delivery ports may be configured with the capability to be heated so that such deposits do not interfere with the delivery of a substance thereby. In addition, movement of delivery ports may be effected via movable stages within the trap device 110. Such a configuration may enable the delivery ports 152, 154, 156, 158, 160, 162, 164, 166, 168, and/or 170 to be effective over a greater area within the trap device 110, thus reducing the number of delivery ports required. Of course, movable delivery ports may be configured to articulate, rotate, or otherwise translate within the trap device 110, may be automatically controlled or manually controlled, and may be operated at predetermined intervals, manually or responsive to some condition within trap device 110. For example, measurement devices 172, 174, and 176 may be used to indicate the relative amount of deposits within a particular area of the trap device 110 by determining the thickness of such deposits. Measurement devices 172, 174, and 176 may thus comprise deposit thickness measurement devices as known in the art, such as devices employing reflected or refracted light or ultrasonic waves, or electrical resistance, or visual inspection devices such as borescopes for allowing ~~visual inspection~~ inspection of the trap device deposits. Other deposit measurement devices may include weight, flow rate, pressure drop, mass flow into the trap device 110, mass flow out of the trap device 110, and resistance to flow through trap device 110, or other measurements indicative of a characteristic of the deposits therein. As shown in FIGS. 2A-2D, measurement devices 172, 174, and 176 may be configured to measure a characteristic of a deposit from

outside the cylindrical housing 122, through or partially through the cylindrical housing 122, or within the cylindrical housing 122, or otherwise as may be desirable. Measurement of the thickness of deposits through the cylindrical housing 122 may be advantageous because some measurement technologies may not function in a vacuum environment, such as noncontact ultrasonic measurement devices. Further, the measurement devices may be configured to measure a condition within the cylindrical housing 122, such as temperature, concentration of a gaseous constituent passing therethrough, temperature therein, or other operational condition within the cylindrical housing 122.

Please amend paragraph number [0051] as follows:

[0051] Thus, as may be seen in ~~FIGS. 2A-2C~~, FIGS. 2A-2C, gases may move along the lower extent of the outer deflection tube 124 and into annulus 138 formed between outer deflection tube 124 and the vertical structure comprising the coils 120 and coil separation elements 130 and sealing element 131. Sealing element 131 may be configured to engage and seal against the bottom inner surface 144 of the cylindrical housing 122 as the top plate 128 and cooling assembly is installed within the cylindrical housing 122. Accordingly delivery ports 156 and 166 may cause deposits 113 to form or to be distributed away from the area proximate to the bottom inner surface 144 of the cylindrical housing 122, the sealing element 131, and the bottom end of the outer deflection tube 124.

Please amend paragraph number [0070] as follows:

[0070] In yet another exemplary embodiment, turning to FIG. 4A, during operation, gases may pass through the trap device 310 in a similar fashion as described with respect to the conventional trap device 10 as shown in FIGS. 1A-1C. Gases may pass through the vacuum inlet 312 ~~extending~~ extending through top plate ~~328 and~~ 328 and into the passages formed by inlet deflection plate 334, wall 342 of the cylindrical housing 322, outer deflection tube 324, coils 320, separation elements 330, sealing element 331, inner deflection tube 326, bottom inner surface 344 of the cylindrical housing 322, and baffles 332. Thus, the path of gases passing

through trap device 310 may comprise vacuum inlet 312, annulus 336, annulus 338, annulus 340, aperture 345, and vacuum outlet 314. Cooling of the interior of the trap device 310 may be accomplished by a cooled medium passing through the cooling inlet 316 through the coils 320, and out of the cooling outlet 318.